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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,959	12/15/2003	Myung Chul Song	2060-3-88	4462

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LEE, HONG, DEGERMAN, KANG & SCHMADEKA
660 S. FIGUEROA STREET
Suite 2300
LOS ANGELES, CA 90017

EXAMINER	
ABDI, AMARA	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/736,959	SONG ET AL.	
	Examiner	Art Unit	
	Amara Abdi	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☒ Claim(s) *14-16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/15/2003
11/17/2005
06/28/2006.

DETAILED ACTION

1. Applicant's response to the last office action, filed August 7, 2007 has been entered and made of record.

2. In view of the Applicant amendments, the objections to the specification are expressly withdrawn.

3. In view of the Applicant amendments, the objection to the claim 16 is expressly withdrawn.

4. Applicant's arguments with respect to claims 1-9 and have been considered but are moot in view of the new ground(s) of rejection.

Remarks:

5. Applicant's argument with respect to claims 10-13, have been fully considered, but they are not persuasive.

Applicant argues that Rowe does not disclose the just identified "assigning" element of claim 10.

However, in response to applicant's argument, Examiner would like to point out that claim language is given its broadest reasonable interpretation.

First, the method of Rowe is read on the broad claim language calls for "determining the difference between the first comprehensive value and a corresponding comprehension initialization value is interpreted as a value" because the claim language does not specify any details how to determine the difference. Rowe discloses that the matching unit provided within the model generation computer processes the received

image data of an individual using the selected face model to obtain a set of weighting values for modeling the received image (paragraph [0027], line 3-6), the difference between the first comprehensive value and a corresponding comprehension initialization value is interpreted as a value, therefore it is the same concept as the obtaining of weighting values for modeling the received image.

Second, Row discloses that the set of weighting values are then returned to the individual's mobile phone, together with the data identifying the face model used to generate the weighting values (paragraph [0027], line 7-10). The operational function is read as the same as (18-1,18-n) which identifies the face model used to generate the weighting values.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Rowe et al. (US-PGPUB 2003/0063778).

(1) Regarding claim 10:

Rowe et al. disclose a method for operating a mobile communication terminal with an integrated photographic apparatus (paragraph [0062], line 4-5), the method comprising:

producing a first image from a first object with the photographic apparatus (paragraph [0023], line 8-9);

detecting a diagnostic element within the first image (paragraph [0051], line 1-5), (the diagnostic element is read as a feature point of face);

deriving at least a first value from the diagnostic element (paragraph [0052], line 1-3), (the first value is read as a the position of the feature point);

deriving at least a first comprehensive value from the first value (paragraph [0051], line 1-5), (the comprehensive value is read as eyes);

determining a first difference between the first comprehensive value and a corresponding comprehensive initialization value derived from at least one initialization value (paragraph [0027], line 3-6), (the difference between the first comprehensive value and a corresponding comprehension initialization value is read as the same concept as the obtaining of weighting values for modeling the received image); and

assigning a first operational function of the mobile communication terminal to the first difference (paragraph [0027], line 7-10), (the assigning of operational function is read as the same concept as the (18-1,18-n) which identifies the face model used to generate the weighting values).

(2) Regarding claim 11:

Rowe et al. disclose a method for operating a mobile communication terminal with an integrated photographic apparatus (paragraph [0062], line 4-5), the method comprising:

producing a second image from the first object with the photographic apparatus (paragraph [0062], line 4-5), (the producing of second image is read as the same concept as the producing of any image);

detecting a diagnostic element within the second image (paragraph [0051], line 1-5), (the diagnostic element is read as a feature point of face); and

deriving the at least one initialization value from the diagnostic element (paragraph [0052], line 1-3), (the initialization value is read as a the position of the feature point).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe et al. (US-PGPUB 2003/0063778) in view of Hirano et al. (US-PGPUB 2005/0221856).

(1) Regarding claim 12:

Rowe et al. disclose all the subject matter as described in claim 11 above.

Rowe et al. do not explicitly mention the applying of at least one threshold value to the comprehensive initialization value.

Hirano et al., in analogous environment, teaches a cellular terminal image processing system, where applying of at least one threshold value to the image (paragraph [0020], line 3-8), (the applying of threshold to the image is read as the same concept as the applying of at least one threshold value to the comprehensive initialization value).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et el., where applying a threshold value to the image, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

(2) Regarding claim 13:

Rowe et al. further disclose the method, where the diagnostic element (paragraph [0051], line 3), (the diagnostic element is read as a feature points) comprises:

a preliminary diagnostic element comprising a face featured on a head of an individual (paragraph [0040], line 5); and

a secondary diagnostic element comprising a pair of eyes featured on the face of the individual (paragraph [0040], line 6).

10. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. (KR 10-2002-17576) in view of Hirano et el. (US-PGPUB 2005/0221856).

(1) Regarding claim 1:

Jung et al. disclose a motion capture system, comprising:

a photograph apparatus connected to the terminal (See the Abstract, line 9-13);

an image processing unit for processing images produced by the photographic apparatus (See the Abstract, line 16-24) ; wherein control information is developed responsive to moving occurring in the images (See the Abstract, line 26), (the motion information is read as the control information); and

an operational controlling unit for corresponding an operational function of the terminal to the control information (See the Abstract, line 27-28).

Jung et al. do not explicitly mention a mobile communication terminal.

Hirano et el., in analogous environment, teaches a cellular terminal image processing system, where using the mobile communication terminal (paragraph [0069], line 1-2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et el., where using a mobile communication terminal, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

(2) Regarding claim 2:

Jung et al. further disclose the system, where the image processing unit compares at least one initialization value with at least one corresponding value from the control information (See the Abstract, line 27-28), (the applying of the motion information to a character is read as the same concept as the comparing of the initialization value with at least one value from the control information).

(3) Regarding claim 3:

Jung et al. disclose all the subject matter as described in claim 2 above.

Jung et al. do not explicitly mention the system, where the user sets the initialization value.

Hirano et el., in analogous environment, teaches a cellular terminal image processing system, where the specialized dictionary categories can be designated by a user (paragraph [023], line 4-5), (the designating by a user of the specialized dictionary categories is read as the same concept as the setting of the initialization value by the user.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et el., where the user sets the specialized dictionary categories, in the system of Jung et al. in order to obtain a highly convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

(4) Regarding claim 4:

Jung et al. further disclose the system, where the image processing unit detects a first difference between the at least one initialization value and the at least one corresponding value (See the Abstract, line 27-28), (the applying of the motion information to a character is read as the same concept as the detecting of the first difference between at least one initialization value and the one corresponding value).

(5) Regarding claim 5:

Jung et al. further disclose the system, where the control information comprises the first difference between the at least one initialization value and the at least one corresponding value processed from the image (See the Abstract, line 26-28), (the control information is read a motion information).

(6) Regarding claim 6:

Jung et al. disclose all the subject matter as described in claim 5 above.

Jung et al. do not explicitly mention the system, where the user sets the first operational function of the terminal to correspond to the first difference.

Hirano et el., in analogous environment, teaches a cellular terminal image processing system, where the specialized dictionary categories can be designated by a user (paragraph [023], line 4-5), (the designating by a user of the specialized dictionary categories is read as the same concept as the setting of the first operational function).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et el., where the user sets the specialized dictionary categories, in the system of Jung et al. in order to obtain a highly

convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

(7) Regarding claim 7:

Jung et al. disclose a motion capture method, comprising:

photographing an object to produce images (See the Abstract, line 9-13);

processing the images for control information (See the Abstract, line 16-24), (the control information is read as the motion information).

setting an operational function to correspond to the control information (See the Abstract, line 26); and

wherein the control information is developed responsive to movement occurring in the images (See the Abstract, line 26), (the motion information is read as the control information.

Jung et al. do not explicitly mention the mobile communication terminal, and the operating of the mobile communication terminal. (The Examiner assumes that Jung et al. disclose, "based on the control information").

Hirano et el., in analogous environment, teaches a cellular terminal image processing system, where using the mobile communication terminal (paragraph [0069], line 1-2), and operating the mobile communication terminal (paragraph [0036], line 11-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Hirano et el., where using a mobile communication terminal, in the system of Jung et al. in order to obtain a highly

convenient mobile-terminal –type translation systems, mobile terminals, and servers for translation (paragraph [0012], line 2-4).

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al. and Hirano et el., as applied to claim 7 above, and further in view of Neal (US-PGPUB 2003/0058236).

Jung et al. disclose a motion capture method, comprising:

extracting a first value from the processed image (See the Abstract, line 26), (the extracting of motion information is read as the same concept as the extracting of the first value from the processed image);

developing first control information (See the Abstract, line 27); and

generating a control information signal based on the first control information (See the Abstract, line 28-29).

Jung et al. do not explicitly mention the method, where comparing the first value to an initialization value; and determining the first difference between the first value and the initialization value.

Neal, in analogous environment, teaches a method and apparatus for auto-generation of horizontal synchronization of an analog signal to digital display, where comparing the first value to an initialization value (paragraph [0037], line 4-6), (the comparing of the pixel clock to the feature edges is read as the same concept as the comparing of the first value to an initialization value); and determining the first difference between the first value and the initialization value (paragraph [0011], line 4-7), (the

determining of the difference between the initialization value and the adjacent ones of pixels is read as the same concept as the determining the first difference between the first value and the initialization value).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Neal, where determining the difference, in the system of Jung et al. in order to have an efficient method and apparatus for automatically adjusting a clock and phase for incoming RGB signal suitable for display on fixed position pixel display such an LCD (paragraph [0009], line 1-4).

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung et al., Hirano et el., and Neal, as applied to claim 8 above, and further in view of Nishi et al. (US-PGPUB 2002/018525).

Jung et al., Hirano et el., and Neal disclose all the subject matter as described in claim 8 above. Furthermore, Jung et al. disclose the extracting a first value from the images (See the Abstract, line 26), (the extracting of motion information is read as the same concept as the extracting of the first value from the images).

Jung et al., Hirano et el., and Neal do not explicitly mention the system, where setting one value as the initialization value.

Nishi et al., in analogous environment, teaches an image decoding method, where setting one value as the initialization value (paragraph [0136], line 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the system of Nishi et al., where setting one value as the

initialization value, in the system of Jung et al. in order to reduce the delay time from the data input, and display the decoded images satisfactorily, even when the decoding process is started from a P frame (paragraph [0042], line 6-8).

Allowable Subject Matter

13. Claims 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information:

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amara Abdi whose telephone number is (571) 270-1670. The examiner can normally be reached on Monday through Friday 7:30 Am to 5:00 PM E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wu Jingge can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amara Abdi
10/10/2007

MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600